

Parapsychology-towards causal research

Naresh Kumar^{1*}

ABSTRACT

Parapsychology studies the paranormal events and research is going on from over a century, which is compiled in vast research literature. Most of the research is confined to prove that the events reported are real and are not fruits of imagination / trickery. Laboratory experiments (Rhine / Ganzfeld experiments) are, all, being done to prove that some people are gifted with paranormal capability. Meta-analysis and surveys are also done to bring credibility to Parapsychology. As per me, probably, so far, the line of research for proving existence of paranormal events was necessary because of stiff opposition from some thinkers and skeptics who brushed these aside as mere non-sense, their belief further aggravated due to several frauds which were proved in this field. However causal research in the field appears to be rare—I could come across only very few which dealt on causal aspects of parapsychological research. May be, now, time has come that we move towards causal paranormal research in a deterministic way. This paper is dedicated to researchers with an appeal to researching fraternity to consider moving towards causal parapsychological research. In a humble feeble way, some suggestions have been made to outline an approach.

Keywords: *Parapsychology, Causal Parapsychological Research, Paranormal Events, Psi*

Paranormal events are the ones which defy logic and cannot be explained by our known five senses—hearing, seeing, smelling, touching, and tasting.

Telepathy, Clairvoyance, Precognition, Psychokinesis and Life after Death are such events which are so bizarre and intriguing that mankind is simply baffled to observe these.

The term “psi” is often taken to notify these paranormal events. Term psi is derived from 23rd letter of Greek alphabet and the first letter of word Psyche.

Study of psi forms the subject, “Parapsychology”, which studies the paranormal (psi) events. History abounds in reports of unusual psi phenomena and from time immemorial and till date many incidents are reported on different aspects of Paranormal.

¹Advanced Certificate in Parapsychology from Australian Institute of Parapsychological Research, Australia

[*Responding Author](#)

Received: April 17, 2020; Revision Received: May 08, 2020; Accepted: June 25, 2020

© 2020 I licensee IJSI. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

Parapsychology-Towards Causal Research

Brief history of parapsychological research

The bizarre occurrences are evidenced from Mediums in the Old Testament (Samuel 28:7-12, 1010 BC) and Haunted houses in ancient Greece (115 AD) to the modern day happenings captured in documented research journals.

The beginning of scientific application to weird and unnatural phenomena starts with Mesmer (1733-1815).

Mesmer while experimenting on effect of magnets in physiological functions of body (e.g., blood flow rates) realized that there existed energy in universe which flows in our body as well, and if distribution of this energy is balanced, the body remains healthy. Imbalance leads to sickness and health disorders.

He termed this energy in body as “Animal Magnetism”. To treat health disorders; animal magnetism could be transferred from healthy body to the patient to bring uniformity of this energy to cure the person. The transference could be done simply by touch.

He could cure many patients having fits and seizures. He and his disciples, while doing this therapy, found that their patients, during therapy went to sleep-like state and were responding to their commands. The phenomenon became popular as, “Mesmerism”, which ultimately, over period of time developed to “Hypnotism”- a therapy used even now by Psychologists to treat patients with mental disorders. Not only that, but, use of trance-like mental state is also made in current experimental parapsychological research.

Some of Mesmer’s patients, in sleep-like state, were able to gain access to information / events that were inaccessible to them through normal means, e.g., describing actions done by a person in another room. These were first ever known instances of Telepathy witnessed under controlled condition. From these outcomes, Mesmerism can be considered a Major Factor in the origin of Parapsychology.

Brief history of Research on “life after death”

Documented research on life after death may have started with appearance of Fox sisters in 1848, who became popular for demonstrating their ability to communicate with discarnate spirits, though in later stages they lost credibility when one of them admitted using fraudulent measures. Bizarre happenings involving discarnate spirits communicating with their living member of family, led some eminent scholars from different fields to undertake investigations of the psychic events and in UK, Society for Psychical Research was formed in 1882, with first president Henry Sidgwick (1833-1900) who was a philosopher. He was joined by Frederic Myers (1843-1901)—a scholar and poet and Edmund Gurney (1847-1888)-a psychologist.

It was only after SPR was formed that structured research, in anomalous occurrences, started. It became the first organization dedicated to scientifically exploring the paranormal.

SPR initiated the research which is well documented in Frederick Myer’s book (1903), “Human Personality and its survival of bodily death”, published posthumously, which analyses the

Parapsychology-Towards Causal Research

phenomena associated with what he called “Subliminal Self”, such as *Automatic Writing*, precognitive dreams and trance states of mediums, and is regarded as a major theoretical contribution to understanding this kind of anomalous mental experience.

At the time when Society for psychical research was continuing research work on life after death, the United States and Europe were in midst of Spiritualism, a movement in which claims of the paranormal were commonplace. A group of scientifically minded men; many who were professional scientists, wished to explore these claims dispassionately using scientific processes. The American Society for Psychical Research was founded in 1885 with notable members William James (1842-1910) and Sigmund Freud (1856-1939)

Life after death incidents were pouring in from different parts of globe and researchers were documenting and analyzing them. Surveys were being conducted in different parts of world and the results spoke volumes about the baffling events.

The surveys conducted involving thousands of Americans (associated press, 1982) and western Europeans (Goldman 1993) indicate that majority of them expressed their belief in life after death.

There is abundant literature in support of survival after death. Eastern religion believes in collective existence after death (Braude, 2003), whereas, western philosophy maintains individuality in after life. James (2002) talks about Mystical states where individuality is lost and we become one with **Absolute** and we become aware of oneness --- this resembles the Indian school of thought.

Stevenson (1984) did pioneering work in field of “reincarnation” for 4 decades and published many papers.

LaGrand (1999) referred After Death Communication (ADC), as spontaneously experienced contact with a deceased loved one. ADC incidents are reported in surveys across the world; Grimby (1993) interviewed 14 widowers and 36 widows in Sweden and 82% of them reported experience of “Hallucination” concerning dead spouses within a month after death. Marris (1958) surveyed 72 widows in London and 50% sensed presence of dead and so on.

Several theories loomed up on survival after death:-

- **Survival Theory**- Moreman(2006), Krippner(2000)suggested in their survival theory that the communications with deceased happen through direct experience, or through mediums, who demonstrate their ability of calling spirits and communicating with them and, lastly, through memories of past life; i.e., reincarnation. Indian Holy book, “Bhagwad Gita” gives philosophical details about survival theory.
- **Super psi theory** (Braude2003; Sudduth 2009) followed Survival Theory. Super Psi theory did not believe in discarnate spirits and propagated the idea that after death communications happened due to super psi ability of mediums.
- **Radical Survival theory, Lance Storm (2006)** was next in line. This theory treads a medium path between the two earlier theory –it does not believe in discarnate spirits but suggests continuation of life through knowledge which does not stop with death but remains alive and gets submerged in Absolute knowledge—the theory, though, makes use of psi theory to explain discarnate communications.

Parapsychology-Towards Causal Research

- **Energy Survival Theory** is presented in my recent paper. This brings forth detailed account of contemporary theories on life after death and it goes beyond to outline a new improvised theory based on Energy Forms. This theory says that we are nothing but *subtle energy forms* and since energy cannot be destroyed, it only gets transformed; we also change forms from visible (life energy) forms to latent (subtle energy) forms and vice versa signifying life-death-life cycle (Naresh Kumar; 2020).

So much so for research work on life after death.

Brief history of Research on ESP

On one front, researchers were discussing life after death and on another front research was happening to explore ESP i.e., Clairvoyance, Telepathy, Precognition and Remote Viewing. Even in ancient times these phenomena were common.

In Indian religious book, “Maharabharata”, the incidence of remote viewing is mentioned when the blind king Dhratrashtira is being narrated happenings in battlefield by Sanjay through his Divya Drishti i.e, his capability of remote viewing. Psychokinetic ability is also depicted in same epic, when Shakuni is able to influence the outcome of dice in the game played between Duryodhan and Pandavas.

In current times, unlike Survival Research, research on ESP has moved out from philosophical fold and moved into experimental arena.

Around 1910, Stanford University entered into psychical research, studying Clairvoyance and Psychokinesis under stringent laboratory conditions.

Later, in the 1920s, Parapsychology laboratory of Duke University entered the field, led by J.B. Rhine (1894-1980). Rhine believed that psychical research should be moved out from societies doing the research and brought it into laboratories in university and changed the research to experimental science. Rhine undertook experiments that followed the scientific methods of other disciplines (e.g., using quantitative data & statistical analysis).

Card guessing experiments were done using specially designed Zener Cards. Using these cards, he set up experimental techniques for testing clairvoyance in laboratory. Several experiments were done using methodology —One card every minute would be removed from Deck and placed with face down and the participant was asked to guess the shape (out of 5 shapes in Zener cards) and if guess was correct it was taken as a “hit”. This ability of correct guessing above chance probability was considered an extra sensory ability. This ability was found in several people during extensive experiments done by the laboratory. Details are available in a book by Rhine. The word ESP (extra sensory perception) was first coined by Rhine, (Beloff.1993)

However, subsequently other researchers could not replicate his results and his line of research did not make much headway after him.

Better designed experiments were conducted later – these were called ***Ganzfeld*** Experiments. The description of Ganzfeld Experiments on telepathy is given by Honorton and Daryl Bem (1994): “The receiver is placed in a reclining chair in an acoustically isolated room.

Parapsychology-Towards Causal Research

Translucent ping-pong ball halves are taped over the eyes and headphones are placed over the ears; a red floodlight directed toward the eyes produces an undifferentiated visual field, and white noise played through the headphones produces an analogous auditory field. It is this homogeneous perceptual environment that is called the *Ganzfeld* ('total field'). To reduce internal somatic 'noise,' the receiver typically also undergoes a series of progressive relaxation exercises at the beginning of the Ganzfeld period. The sender is kept in isolation in a separate acoustically isolated room, and a visual stimulus (art print, photograph, or brief videotaped sequence) is randomly selected from a large pool of such stimuli to serve as the target for the session. While the sender concentrates on the target, the receiver provides a continuous verbal report of his or her ongoing imagery and mentation, usually for about 30 minutes. At the completion of the Ganzfeld period, the receiver is presented with several stimuli (usually four) and, without knowing which stimulus was the target, is asked to rate the degree to which each matches the imagery and mentation experienced during the Ganzfeld period. If the receiver assigns the highest rating to the target stimulus, it is scored a hit". If success rate occurrence was above 25%, the telepathy success was supposed to be statistically significant and the phenomena of telepathy was considered to exist.

Laboratory experiments by Rhine and subsequent Ganzfeld experiments were done extensively to prove that there is substantial evidence to prove that the psi happenings were not due to chance cause (as size effects were found pointing this) but were in fact real anomalous incidents. Meta-analysis were done to pool several studies and these led to prove or disprove statistical significance of existence of psi.

Even US army got convinced about remote viewing incidents and launched "Star gate program" to use Remote viewing as a spying weapon to locate enemy installations. The program ran for not less than 20 years (1972-1995); Sonali Marwaha & Prof May (2015) Researches also happened to eliminate conceptual difference between ESP and PK; M. A. Thalbourne's (1982) theory of Psychopraxia is put forward as an alternative interpretation of the paranormal that assumes there is no necessity for making that distinction between ESP and PK and between normal information acquisition and normal motor control

Similarly, Sonali Marwaha and Prof May (2019); went on still further to unify different aspects of psi into a single term "Informational psi" by suggesting collapse of different aspects of psi phenomena under unified "Informational psi".

Today, a number of parapsychological organizations exist that study anomalous phenomena and psi research continues.

Causal psi Research is the need of hour

As we observe from above discussion on "Life after death" Research or even ESP research, that, all theories are centered to theorize whether ESP really exists or life after death does happen; we are still far away from doing causal research.

So far, I have not come across any literature which deals with causal research in scientific terms on life after death. However, I could locate some literature which attempts causal research to ESP (Sonali Marwaha & Edwin May; 2015, Dean Radin;2006)

Parapsychology-Towards Causal Research

I think, now, is the time to move towards Causal Research i.e., we must attempt to find the real causes underlying Life after Death, ESP and PK, i.e.,

Why these events take place; How these take place; What is the structure of these events; What causes them to happen and what factors make them happen, Why these are only sporadic –may be that there are a combination of conditions which if occur simultaneously make the paranormal events happen—What are they? What is the mechanism of perception of these events and what are scientific theories underlying these events?

Answer to above questions are not easy to find and it will take long and persistent efforts of researchers to dwell on the details. These will not get answered by efforts of parapsychologists working in isolation, the researchers from other disciplines will have to join hands with them to do meaningful research in this area.

This paper, just, wishes to initiate thoughts in mind of researchers to align them to attack the core issue which will set the ball rolling. In this paper we shall highlight the challenges ahead against this line of research. We shall also hint out possible causal approaches (there can be many more), which could be taken to uncover the secrets underlying the paranormal events

First let us look at impediments on the way to Causal psi Research

Impediments in the way of Causal psi Research

Let us examine impediments coming in the way to causal psi research.

As per Samah Khaled Zahran(2017), “psi challenges, barriers or problems- among skeptics, or who persist studying its phenomena rise from:

- No total acceptance among academics, researchers, common people about psi existence as classic science.
- The inconsistency in some experimental studies, in replication, which is common with humanities sciences, not only restricted to psi.
- The inadequate theoretical framework that explain and interpret psi phenomena and factors that cause them”

Naresh Kumar (2020) listed down nine major factors which are preventing the parapsychological research getting its rightful place in mainstream science. I think some of these are also pertinent impediments coming in the way of doing causal psi Research. The nine factors as listed were:-

Possible trickery and other unscientific explanations of psi; Failure to achieve replications; Lack of commonality in definition of subject matter; Negative definition of psi; Lack of continued progress in research; Methodological flaws in experiments; Reliance on statistical methods in PSI research; Theorizing the event before it comes out of data; No Physical Explanation possible for psi” (Naresh Kumar, 2020, pp 8 to 13)

From the impediments outlined in above paragraphs, the factors which pose challenge to causal Parapsychological research appear to be:-

Resistance to acceptance of psi phenomena (due to absence of scientific theory or evidence) by common people, academicians, researchers and sceptics –aggravated by trickeries and frauds by mediums; failure to achieve replications and unscientific explanations of psi- The (inadequate) theoretical framework and factors which cause them.

Parapsychology-Towards Causal Research

The main impediment which pushed us away from causal research is the first factor and to some extent the failure to achieve replications was also instrumental in making us think that we must first try to prove the very existence of psi.

First and foremost obstacle to causal psi research was the opposition built up due to a breed of “mediums” who used fraudulent methods to assert that they possess psi capabilities. They were using fraudulent methods to prove anomalous through trickery just to gain popularity, fame and for making fortunes.

Hansen (2001), has given detailed account of frauds for paranormal events in his book “prominent Psychics”.

Several theories were put forth by Sceptics to discredit psi events.

Wiseman (2011), outright, rejected Paranormality. In fact, he wrote a book to condemn it by propagating, “Paranormality --why we see, what isn't there.”

In his book, Wiseman put forward many arguments against paranormal events. He that by preplanning one could enact psychokinetic feat of spoon bending; On Telepathy he said, “you could successfully pose as a mind reader by careful phrasing of sentences carrying double meaning.” Even the incidents in which dreams which came true, was defended by him as mere coincidences manifested due to prevailing anxiety in minds.

Alcock (2003) was of the view that since paranormal events cannot be replicated, these lose their credibility. As per him the major factor against Parapsychology being accepted as a subject in mainstream science is that the psi events are not replicable and hence we cannot believe in their manifestation. Alcock cites many research papers to bring home this point.

John Beloff (1980), staunchly, believes that there cannot be physical explanation to psi. He admits that it is generally believed by some researchers that with exploration of unexplored portion of mind, many unexplained happenings will get explained. He says that even then, psi cannot get explained because a theory which is physical cannot cover psi and conversely a theory which encompasses psi could not be strictly physical.

As seen above, thinkers as well as Sceptics were raising doubts about existence of paranormal events and some of them claimed that since these are not repeatable, we cannot believe that they, even, exist.

For example, in his article “Is There ESP”, David G. Myers (2011), a Psychology Professor at Hope College, notes that in order for people to consider parapsychology a credible science, parapsychologists need, “a reproducible phenomenon and a theory to explain it.” According to Meyers and many other scientists, this does not exist in the field of parapsychology.

Thus, sporadic happenings of ESP events and their lack of repeatability can also be considered as stumbling blocks for Causal ESP research which prevented research to move on causal path.

As seen from above discussions that the frauds and the thinking by sceptics put a big question mark whether the psi events are real? To counter this, the research got focused in proving its existence and thus, became a stumbling block to causal research.

Parapsychology-Towards Causal Research

Another aspect which may not lead to an effective causal research is use of probabilistic approach used in current ESP research. We are evaluating experimental data using statistical techniques of testing of hypothesis and trying to prove that the experimental data establishes that the event occurred due to causes other than chance causes because effect sizes point in this direction. In my opinion, a phenomenon cannot be proved to be scientific using probabilistic approach, these at best can be only exploratory; the phenomena have to be explained deterministically with absolute certainty to bring it in the folds of mainstream science. Hence causal ESP research must take a deterministic approach.

Impediments pertaining to Causal Survival Research

Besides the frauds, other aspect which proved a major stumbling block to causal Survival Research is the primitive stage in which this research finds itself. The Survival Research, so far confines to only philosophical thinking ---may be the causal research is not possible because ticket is one way ---- you die, but you cannot come back to tell what happened to you when you died.

Fear of death may be another factor which may be preventing us to probe this area causally. The after-death research may be a dangerous area to probe in. To elaborate this point, I recall the incident of Gaurav Tiwari.

In India, the founder of Indian Paranormal Society---Mr Gaurav Tiwari, who was actively involved in the research on Survival after death, met mysterious death at the age of 31 and, till date, the mystery of his death is not solved. A faint black ring was found around his neck--- what caused this, could not be established. Before his death, he had expressed his feelings that negative powers are pulling him towards them!!” (Naresh Kumar; 2020)

Having understood the gigantic impediments to causal Parapsychological research, let us see whether, still, we can find some possible approaches which could lead to its Causal research.

Moving towards causal Parapsychological research

On the onset, I wish to make it clear that I am not an authority to criticize research done hitherto nor is my intention of doing so. Work done so far is valuable beyond doubt, and has brought credibility to Parapsychology. I am still in the process of digging into the vast. Literature and daily I am adding to my knowledge. Eminent scientists and researchers including my peers in the field are busy researching and newer ideas and theories are emerging. I, only, humbly suggest whether we can start thinking about the causal reasoning also, which could explain paranormal events.

Therefore, my humble submission is that we must devote some of our efforts (beginning is done by Sonali and May) towards causal Psychological Research, which could be possible to undertake using some approaches as outlined below and through many more, which could emerge through innovative thinking of researchers.

Moving towards Causal Survival Research

As mentioned earlier in the paper, Survival Research is still in its infancy and mere philosophical theories have emerged. Impediments in the way to causal research was also discussed, but, still could there be a way out for causal survival research?

Parapsychology-Towards Causal Research

I think we should look this problem with optimism—When Brain could research itself, which was a matter of impasse like the impasse in life after death where ticket is one way; there could be similar way out.

The brain research is happening and the impasse, “brain researching brain”, is overcome and we, now, know some aspects of brain functioning, though, major portion of brain still remains unexplored and neuroscientists are busy in exploring the unknown portion of brain.

One approach taken in brain research was to understand what caused some brain patients to do weird things—what changes in their brain triggered their weird actions.

V S Ramachandran (2010) in his book, “The Tell Tale Brain”, takes us on a fascinating journey into the human brain. While studying patients who exhibit bizarre symptoms, he used the learning to understand the functions of the normal brain.

He could explore deviations in brain of patients compared to normal brains and, thus, give better understanding of human brain. In his own words, “It is difficult to talk about brain without waxing lyrical. But how does one go about actually studying it? There are many methods, ranging from single-neuron studies to high-tech brain scanning to cross- species comparison. I generally see patients who have suffered brain lesions due to stroke, tumor, or head injury and as a result are experiencing disturbances in their perception and consciousness. I also sometimes meet people, who, do not appear brain damaged or impaired, yet, report having wildly unusual perceptual or mental experiences. In either case, the procedure is the same; I interview them, observe their behavior, administer some simple tests, take a peek at their brain and then come up with a hypothesis that bridges psychology and neurology--- in other words, a hypothesis that connects strange behavior to what has gone wrong in the intricate wiring of the brain. A decent percentage of time I am successful. And so, patient by patient, case by case, I gain a stream of fresh insight into how human mind and brain work---and how they are inextricably linked.”

Using above approach, he came up with incredible brain research done to alleviate the sufferings of patients of Complex Regional Pain Syndrome (CRPS-II) by facilitating unlearning of “learned pains” through use of “phantom limbs”. He uncovered the mystery behind “Color Synesthesia” when he investigated patients who saw colors when shown digits i.e., brain linking color with digits in some people. Also, while studying brain with respect to pain, he could discover “Mirror Neurons” which get activated with pain in self body as well as when person sees other person having pain. As per him The Mirror Neurons could be used to treat Autism.

Thus, impasse of Brain researching itself was circumvented and brain research progressed well and is still marching ahead.

Could we not tow same line for Survival research? We do have unusual instances (like impaired brains as discussed above) when people have had near death experiences or when they came back to life after being declared dead. We also have out of body experiences. Such real life events are similar to brain dysfunctional events. And there are documented posthumous messages, presumably, from Frederick Myers to work on.

These have similarities with brain malfunctioning which were studied and the studies resulted in brain research--- could we not take a cue from Mr Ramachandran’s approach to brain research and

Parapsychology-Towards Causal Research

find our own innovative ways to probe death by making use of such unusual death events. Neuroscientists, Medical researchers and parapsychologists as a team could probably work towards Causal Survival Research by deeply studying such unusual death events which might give some clue to life after death.

And may be, there may emerge more ingenious ways to circumvent impasse over life after death and carry on the causal survival research.

Moving towards Causal ESP Research

Telepathy: One common experience which we all may have had is that we, unconsciously do yawning when we see someone yawn. Why we do that? Is this mind to mind connection which compels us to do it?

Another common experience we all may have gone through sometime or the other, is that even with closed eyes, we get a feeling of uneasy sensation that somebody is staring at us and we find that we are being stared at. This is more common with women, who, without looking, become conscious that they are getting stared by some men and in fact someone was, actually, staring at them.

Why this happens? Why we are able to feel uneasiness with simple stare by other person. Is it that the act of staring is result of a focused impact from the mind of the person who is staring to the mind of stared ; is it that the mind of person (who is staring) is releasing some energy which is received by the mind of stared resulting in uneasiness and discomfort in him/her? Does the focused attention compels mind to accumulate this energy and release it to result in the form of uneasiness?

Could it be Telepathy at work in closed proximity (telepathy is known to work at long distances as well)? What is this energy? Is it animal magnetism at work (without touch) as was propagated by Mesmer?

May be the answers to above lies in causal research on telepathy.

While writing above lines, I was thinking that these are original thoughts based on my observational instinct but, later, I got a pleasant surprise when I came across literature which talks about the above staring event:-

Sheldrake Rupert (1998) talks about simple experiments which were carried out in schools in Germany and the United States to test whether or not people can tell when they are being stared at from behind. Lookers and subjects worked in pairs, with the lookers sitting behind the subjects. In a series of trials the lookers either looked or did not look at the subjects in a random sequence determined by tossing a coin. In each trial, the subjects guessed whether or not they were being looked at. The results show an overall positive effect, with 56.9% correct guesses as opposed to 50% expected by chance. In one school in Germany where sensitive subjects were tested repeatedly, 71.2% of the guesses were correct, and two students were right about 90% of the time.

So it is observed by others as well that unseen staring does impact the stared. It could be mind to mind communication i.e., Telepathy.

But how does telepathy happen?

Parapsychology-Towards Causal Research

Let us explore few possible ways to understand how telepathy could manifest. One way is, probably, shown by Nikola Tesla.

Nikola Tesla, the genius working on electrical energy during Edison's time was toying with an idea that thoughts in mind reflect, by reflex action, a picture on our retina and it could be possible to capture the same on an external apparatus. When he died, he was working on a project involving "Thought Projector"

Smith (2017) in his paper, "*Nikola Tesla's wildest Project-----Thought Projector*", mentions "When Nikola Tesla died, he left behind fascinating writings about inventions he never realized. One such invention is *DER GEDANKENPROJEKTOR*, a camera that could be used to photograph thoughts."

Tesla (1933) argued that if it be true that thought reflects an image on the retina, it is merely a question of illuminating the same properly and taking photographs & then using ordinary methods which are available to project image on the screen.

"If this could be done then the objects imagined by a person would be clearly reflected on the screen as and when they are formed, and, in this way, each thought of the individual could be read. Our minds would then be "*Open books*"

Tesla's line of research is extension of the of the fact that it is not necessary that things are seen only with open eyes, one could, even, see things with closed eyes; only difference will be that the objects to be perceived are not external but within the self --- i.e., images, instead of coming from open eye, these can come directly to retina as reflex images from thoughts created by mind and the rest of perception activities in brain can continue as they do normally.

Tesla's thinking seems to be credible; thoughts, by reflex actions, must be producing images on retina, how else could we see dreams??

In fact dreams may be thoughts portrayed as motion pictures which get reflected on retina and through the normal processes of these getting converted into electrical impulses passing on information to neurons and synapses to make us see them as movies while asleep.

Bahar Gholipour (2014) mentions, "Tesla's plans never became a reality but researchers are still studying *vision* and exploring the idea of building mind reading machines.

With machines becoming capable of reading minds, we may get a clue from their working and could then understand how mind does read mind and how telepathy manifests.

If our scientists could invent such innovative equipment, we would have opened a door which offers a clue to get at bottom of mystery of "*Telepathy*".

Physicists, neuroscientists and medical researchers may, one day, come up with solution to telepathy following Tesla's footsteps.

There is another scientific development worth mentioning here which could lead to another approach towards causal research on Telepathy.

Parapsychology-Towards Causal Research

Ralph Lewis (2019) illustrates what thoughts are and how the information is physical. As per him, “Fundamentally, our thoughts are maps which represent and correspond to things that our brains have either perceived with our senses, felt with our emotions, or formed as an action plan. All of these are electrochemically mediated processes. Thoughts may be fleeting, or they may later be consolidated as memories. Memory too is a physical process, encoded by structural molecular changes in neuronal connections.

Sensory perceptions and their memories are physical representations or maps, imprinted by an event”

He goes on to suggest possibility of Telepathy as follows, “Since thoughts are physical and have spatial dimensions (each thought being represented by complex connections between large arrays of neurons), you might wonder if it’s possible to ‘read’ a person’s thoughts from their brain’s patterns of neuronal activity. In fact, scientists have already been onto that project for several years.

Today Scientists have created **artificial retinas** through sophisticated mathematical analyses of how real retinas convert images to electrical impulses to send to the brain. In attempts to mind reading, scientists have developed algorithms that can learn to interpret brain signals and reproduce a rough version of images “seen” in a person’s mind”

On thoughts, Taylor (1998) says “The theory proposes that the contacts may be due to interactions between fields corresponding to the appraisals of thoughts about events. It is suggested that when thoughts are appraised, a field is created which gives rise to the subjective feeling of emotion. If, at a later moment, the same thoughts are repeated and they are similarly appraised, then another field will be created which has a similar structure to the first one. The fields interact and ‘resonate’ together. This not only increases the degree of emotion associated with the thoughts, but it also enables precognition to occur by increasing the attention drawn to the earlier thoughts. Telepathy similarly occurs when the thought appraisals correspond to those of another person. The mechanism allows precognition to occur without raising the intervention paradox.”

There is one more interesting paper which can open doors for understanding mystery behind Telepathy:

Matthews Hutson (2018), in his paper, “*Mind reading algorithm can decode the pictures in your head*” suggests that, “Now scientists have created first algorithm of its kind to interpret- and accurately reproduce—images seen or imagined by another person. It might be decades before the technology is ready for practical use, but researchers are one step closer to building systems that could help us project our inner mind’s eye outward. ... Using algorithms to decode mental images is not new. Since 2011, researchers have created movies clips, photos, and even dream imagery by matching brain activity to activity recorded earlier when viewing images. But these methods have all their limits: some deal with only narrow domains like face shapes, and others can’t build an image from scratch—instead they must select from pre-programmed images or categories like “person” or “bird”. This new work can generate recognizable images on the fly and even reproduce the shapes that are not seen, but imagined.

He is hopeful that with better measurements in algorithms, we might someday communicate thru mental pictures.”

Parapsychology-Towards Causal Research

These theories give us some clues to move into causal aspects of Telepathy.

Thus, we appear to be on threshold for solving the riddle of Telepathy through the above causal approaches.

In above discussions we talked about Telepathy which is *Mind Over Mind* component of ESP and now we divert our discussions on other aspects of ESP viz., clairvoyance, precognition, remote viewing and psychokinesis (PK)

Clairvoyance/ Precognition/ Remote viewing- Be it Clairvoyance or Remote viewing, both these phenomena depend on ability of mind to get piercing thoughts which break the barrier of normal perception of seeing through eyes. In other words, these require seeing through mind's eye. We could even extend this to Precognition as being ability to see through mind's eye without any limit on time and space.

This suggests that since there is commonality (mind working) in all ESP constituents, could they not collapse into a single field of study. In fact Sonali and May (2019) have indicated this in their paper where they say that all ESP aspects collapse into a single aspect i.e., "Informational psi" Sonali and May (2015) have also done work excellent work towards causal research on Precognition.

Precognition causal research: There is a research paper by Sonali Marwaha and Edwin C May (2015) ---"Rethinking Extrasensory Perception: towards a Multiphasic model of Precognition", which does take a step towards ESP causal research. In this paper, the authors define precognition as an atypical perceptual ability that allows the acquisition of non-inferential information arising from a future point in space time. Their Multiphasic Model of Precognition (MMPC) lists two phases: The first is the physics domain, which addresses the question of retro causation and how it is possible for information to traverse from one space time point to another, mainly, through *entropic means*. The second phase- the neuroscience domain addresses the acquisition and interpretation of retro causal signals. The process involves three stages: (a) perception of signals from an information carrier, based on psychophysical variability in a putative signal transducer; (b) cortical processing of the signals, mediated by a cortical hyper-associative mechanism; and (c) cognition, mediated by normal cognitive processes, leading to a response based on retro causal information.

As per authors the future challenges faced in their model is to find answers to: -

1. What is nature of retro-causal signal carrier that propagates backward movement in time (in Physics Domain)
2. What is nature of Retro-causal signal transducer and its cortical connectivity (in Neuroscience domain)

The MMPC model provides a framework for future research to study fundamental questions regarding nature of time, causality and information.

Further research for PC (precognition) has to be in Physics Domain to find details of retro-causal signal carrier that propagates backward movement in time.

Parapsychology-Towards Causal Research

Simultaneously work has to continue in Neuroscience domain to find more details about perception of retro causal signal transducers and their cortical connectivity in brain.

It is clearly evident that unless these unknown areas in physics and neuroscience are researched, we shall not be able to find answers to challenges posed in neuroscience domain of MMPC model.

The two papers by Sonali and May lead us to think that if we are able to pursue further causal research on Informational psi involving precognition towing the approach outlined by them, we would have solved the puzzle of all aspects of ESP.

Psychokinesis: Talking about Psychokinesis takes us immediately to spoon bending feats of Uri Geller. There have been several views on Psychokinetic ability of Uri Geller by renowned people.

Let us see what some prominent scholars have to say about Uri Geller's "spoon bending experiments": -

Professor Victor Weisskopf physicist who studied under Niels Bohr says, "I was shocked and amazed how Mr Geller bent my office key at MIT while I was holding it. The sturdy key kept bending in my hand; I cannot explain this phenomenon I can only assume that it could relate could relate to quantum chromo dynamics".

Jack Sarfatti – PhD, Physicist "My personal judgement as a PhD physicist is that Geller demonstrated genuine psychoenergetic ability at Birkbeck which is beyond the doubt of any reasonable man, under relatively well-controlled and repeated experimental conditions. "

Dr Edgar D. Mitchell S.C.D. (Apollo 14 Astronaut and 6th man to walk on the moon) wonders, "Geller altered the lattice structure of a metal alloy in a way that cannot be duplicated. There is no present scientific explanation as to how he did this." (This is the first research related to parapsychology conducted at a US Government facility to have been released for publication by the US Department of Defence).

Eldon Byrd (US Naval Surface Weapons Centre, Maryland – U.S.A.) says, "The evidence based on metallurgical analysis of fractured surfaces (produced by Geller) indicates that a paranormal influence must have been operative in the formation of the fractures."

"As a result of Geller's success in this experimental period, we consider that he has demonstrated his paranormal, perceptual ability in a convincing and unambiguous manner."(The results of these experiments were published in the respected British journal Nature, Vol. 251, No. 5). Dr Harold Puthoff and Russell Targ (Stanford Research Institute – California, U.S.A.) (urigeller.com/scientific-paranormal/what-scientists-say-about-uri-geller)

The above observations by eminent people go on to suggest that Psychokinesis is real and is not imaginary nor is a product of magic or trickery.

However, there are some contrary views also that spoon bending act is nothing but trickery— Terence Hines a science writer quotes Harris Ben (1985) that Geller has been caught many times using sleight of hand and all his effects have been recreated using conjuring tricks.

Parapsychology-Towards Causal Research

Wiseman R (2011) in his book, “Paranormality, why we see what isn’t there” suggests that feats like spoon bending can be easily performed by doing some advance preparation and hence these are merely trickery.

We know that for all bizarre events, a group of skeptics always arise to propagate disbelief, this was the case with ESP other components and same is true for Psychokinesis as well.

To counter this, researchers normally resort to experimentations to try to prove that the bizarre phenomenon are actually real and are happening. e Rhine’s experiments and Ganzfeld experiments were in same direction for clairvoyance and telepathy. Similar experiments were done to prove existence of Psychokinesis:

Richard Gordon (2020, April) in his paper mentions, “Dr William Triller conducted an experiment, wherein, a group of individuals put their awareness (through meditation) on an electrical circuit which contained a crystal. They then implanted an intent that the pH of water would either go up or go down. The circuits were wrapped in aluminum foil and shipped overnight to a lab across the country, turned on, and set it beside a water sample (with known pH value)

The room was isolated so that people did not enter, and all environmental factors of the room were carefully monitored. Despite the precautions, the water samples did respond exactly to the mind power as the meditators intended. PH rose or fell according to the intentions a full 1.5 pH. The odds against this happening by chance are a million to one.”

Gordon in same paper talks about improvised double slit experiment done by Dean Radin, Chief Scientist at IONS (Institute of Noetic Science founded by astronaut Edgar Mitchell) in which, “Dean wired the meditators with EEG and see when they were getting the best results with the double slit experiment. The EEG tests provided evidence that when people were concentrating most effectively, their ability to affect the double slit experiment increased, and when they stopped focusing, the effect went down. Strong right temporal lobe activity was seen to cause the best results and influence mind over matter.

3rd Experiment quoted by Gordon is by Ms Lynn McTaggart, “She started with the idea of showing that human intention affected matter. The first target was a leaf, and there was another leaf as a control. The intention of the experiment was to see if people could cause the leaf to glow. The group chose which leaf to work on with the flip of a coin.

All living things emit photons and with a sensitive enough camera, you can actually see any living matter glow as it emits bio-photons. Dr. Gary Schwartz from the University of Arizona ran this experiment. The result was that the leaf that received people’s intention glowed far brighter than the leaf that did not receive intention. This mind over matter test was successfully repeated many times.

Another experiment was to see if intention could make a plant grow faster. A large number of people in Australia sent energy to seeds. The charged seeds did indeed grow faster. In yet another test of mind power, there was one experimental group and 3 control groups of plants. All four sets

Parapsychology-Towards Causal Research

were planted. They found that the seeds that had the intention had sprouted soonest and grew fastest.

This has been repeated with many large groups around the world, all demonstrating the possibility of mind over matter. In one experiment, the seeds grew twice as tall as the controls.”

These go on to prove that the Psychokinetic events (which relate to Mind over Matter) are really happening and are not mere trickeries or product of imagination.

While analyzing psi experiments, the researchers often make a mention of “Experimenter effect”- what is it? Could it not be Psychokinesis at work? How else an experimenter influence the result of experiment?

In Quantum context also scientists talk about “Observer Effect”, which again confirms manifestation of Psychokinesis.

However, how these happen, is a matter of *Causal Research*. Can mind emit energy to influence matter?

R Douglass Fields (2008) writes in Scientific American, “All our thoughts, sensations and actions arise from bioelectricity generated by neurons and transmitted through complex neural circuits inside our skull. Electrical signals between neurons generate electric fields that radiate out of brain tissue as electrical waves that can be picked up by electrodes touching a person's scalp. Measurements of such brainwaves in EEGs provide powerful insight into brain function”

Thus, mind does produce energy waves which can be picked up by EEG. Are these energy waves so powerful that their use can affect external matter?

“The human brain does emit waves, like when a person focuses his attention or remembers something. This activity fires thousands of neurons simultaneously at the same frequency generating a wave—but at a rate closer to 10 to 100 cycles per second. *Beta waves (13-38 hz) occur when we are actively thinking, problem-solving, etc.*

Researchers at MIT say that *Brain waves are so weak, they are hardly measurable at all. The magnetic field of the earth is just strong enough to move the needle of a compass. Signals from the brain are a billionth of that strength.*” ([quora.com/What-kind-of-energy-waves-does-our-brain-emit-while-thinking-process](https://www.quora.com/What-kind-of-energy-waves-does-our-brain-emit-while-thinking-process))

The above means that the energy waves emitted by mind are very-very feeble and must not be capable of influencing the external matter.

However, we know that energy, when concentrated/ focused, gathers lot of potential to impact other matter. We have seen that when we place a lens over a paper and let sunrays pass through the lens and then on to paper, the paper burns after some time. The rays carrying heat become focused and converge on a point on the paper and intensity of heat rises to burn the paper.

Parapsychology-Towards Causal Research

Could there be a way that the waves from mind could get powerfully converged on matter in a way similar to converging light rays to a single point and gain the power to influencing external matter, thus, resulting in manifestation of Psychokinesis?

Though logical, the idea appears to be far-fetched to be true. May be there is no way that such feeble waves could be made robust, and, this approach may not show us a way.

Psychokinesis is the least researched field, even, lesser than Survival Research. Since we are at primitive stage, extensive research will be needed before we attempt a causal research on Psychokinesis.

I wish to reiterate here, that like other aspects of psi, Psychokinesis also involves working of mind, hence, clue to causal research, certainly, lies in higher understanding of working of mind. Only advancement in Neuroscience will show us a way.

Dean Radin's approach to causal ESP research

Another scientific approach toward causal research for psi could emerge out of Quantum entanglement which is dealt in detail in Dean Radin's book, "Entangled Minds, extrasensory experiences in a quantum reality"

Dean Radin (2006) says that "with evolution of Quantum theory, we have entered, "Age of Information" in which time, space, energy and matter are imagined to be relative and spooky actions at a distance are not merely possible but required within our understanding of physical reality."

Though he admits that entanglement does not mean that signals can pass between entangled particles because entanglement only means that separated systems are correlated. However, Psi involves information transfer through signal passing. On this point, Radin says that biological systems are clever in figuring out ways of using inanimate matter in ways that would not be predicted based on the properties of those materials alone. So, living systems may be able to figure out how to use quantum correlations to communicate.

How this happens is matter of future research. Also, for further causal research in psi, the Physics, neuroscience and Psychology must find answer to the three problems raised by Radin in Quantum Entanglement, viz.,

1. Information has to reach across space and time in ways that defy commonsense—this is problem in physics domain
2. This information must arrive in your mind without the use of ordinary senses and it must be able to interact with objects at a distance---this is problem for both physics and neuroscience
3. The information must reach conscious awareness often enough for people to report it—this is a problem in psychology"

Entanglement theory goes on to suggest, "Furthermore, we are entangled with everything and anything, so in principle we can mentally interact with everything and anything but we are more likely to receive information that is local to us in space time because the entanglement increases

Parapsychology-Towards Causal Research

in proportion to the number of interactions and that's why we are unlikely to receive information about events that happened million years ago."

He says in his book, "For entangled minds to accurately describe and predict psi performance, we'll need a model that combines features of physics, neuroscience, and psychology. For physics, we must reside in a medium that supports connections transcending the ordinary boundaries of space and time. For neuroscience, minds (by which I mean mind/brains) must be sensitive to and play an active role in that medium. And for psychology, the processes of attention and intentions should play key roles in how mind "navigates" within this medium"

The above two approaches outlined by Sonali/May and Radin do talk about research in physics domain as well as in neuroscience domain which have to find answers to their questions which still remain unanswered.

We know that still neuroscience and medical researchers have to explore large parts of brain and also to understand how consciousness manifests. These aspects are crucial to remove hurdles in way of causal psi research.

The above discussions give us some clues for further causal research in both components of ESP. May be the ideas in above all approaches could be effectively pooled to find an illuminated path to pursue causal parapsychological research.

CONCLUSION

To summarize, the vast research work on Parapsychology since 1882 is primarily focused to prove that the paranormal events comprising of ESP, life after death or PK (Psychokinesis) are real and these do exist. Fraudulent happenings casted doubts on very existence of anomalous happenings and need for proving existence of above paranormal events arose. Such research became necessary because of rise of stiff opposition from skeptics and the frauds done by greedy mediums and cheaters. This made parapsychological researchers to focus mainly on proving that anomalous happenings are real.

Apart from above hurdle to causal parapsychological research, the cause of life after death may not have been investigated because we cannot come back to tell the details of life after we die, because, the ticket is one way. Hence the research of life after death has till date remained philosophical. But still; strong theories, some philosophical and others based on scientific experiments, have evolved, which, establish that the paranormal events do happen.

To my knowledge, the drift towards causal research for ESP has begun with an attempt by Sonali Marwaha and Edwin C May (2015) to do causal research on Precognition. Dean Radin (2006) has also put forth some Quantum Entanglement theories to throw light on causal aspects of psi happenings. Still we have long way to go as many aspects still need explanation in these attempted researches; vital questions still remain unanswered.

Some approaches to causal psi research are given in foregoing paragraphs:

On Telepathy, causal research could progress in line with the dream of Nikola Tesla for developing a *Thought Camera (external to human)*; which could capture the thought images reflected on retina by reflex action when a thought comes to mind. These pictures if proven to get captured in thought

Parapsychology-Towards Causal Research

camera could lead to research in explaining how the thought images are getting captured to another human mind in sporadic cases. We would also learn as to what set of conditions cause them to manifest.

Causal research on this can also proceed by improving and further refining the already developed algorithms of their kind where artificial retina gets the image and can interpret- and accurately reproduce images seen or imagined by another person.

As per Marwaha and May, all ESP aspects collapse into one single aspect of Informational psi based on Precognition. Thus, if their causal approach to Precognition research is pursued further, we would get clarity on causal aspects of ESP. Their work is stuck up to seek answers to two questions: -

1. What is nature of retro-causal signal carrier that propagates backward movement in time (in Physics Domain)
2. What is nature of Retro-causal signal transducer and its cortical connectivity (in Neuroscience domain)

Answers to these questions and the ones posed by Radin require extensive research in domains of Physics, Neuroscience and Psychology.

“Life after death” and Psychokinesis are fields where research is in infancy stage.

Causal research on Life after death is still beyond our thinking due to impasse that death cannot be explained without actually dying. But there has to be a way out from this impasse in the way brain could research itself because it was also an impasse- how to use brain to research itself. Maybe we can take cue to understand the phenomenon as was done in brain research by Ramachandran who probed the brain by investigating causes of brain aberrations as and when they occurred, which lead to discovering primary functionality of brain to the extent that we know today. On same lines, we could do causal survival research by studying cases of people who become clinically dead but recover back to life; near death experiences and out of body experiences are also worth critically studying and we can get a clue for proceeding to causal survival research. There would certainly be a way out with these approaches.

Of course, there could be rise of some more Ramachandrans (he used innovative approach to brain research) amongst us who could find some other innovative approach which could lead to causal survival research. We still have to figure out a way for Causal research on Psychokinesis. May be with advancement of neuroscience research we could find some clue for this field.

There is no other way, but, the causal research, which will make ESP, life after death or PK become normal events and the tag of paranormal will get eliminated. Advancement in physics, neurological science and medical sciences will certainly show us the way. These events will continue to meet stiff opposition till causal Parapsychological research clarifies all doubts and, in fact, then, Parapsychology would cease to have its existence in isolation, it will become a part of Psychology.

Let us not forget how Newton got idea about gravitational laws. Apples kept on falling on ground but existing science, then, could not explain its cause. When Newton's efforts made advancement in science, these got explained.

Parapsychology-Towards Causal Research

I conclude by saying that distinction between Paranormal and Normal vanishes with advancement of science. How else, “Thunder” and “Lightening” which must have frightened the primitive man as Paranormal events became casual and normal events when science advanced and gave causal reasons not only for their manifestation but also explained the conditions which made these to happen. How true appear the immortal words of St. Augustine, who, once said, “Miracles do not happen in contradiction to nature but only in contradiction to that which is known to us of nature.”

The knowledge of nature must advance through the combined causal research efforts of Parapsychologists, neuroscientists and physicists to unravel causes behind paranormal!!

REFERENCES

1. Alcock J E (2003) “give the null hypothesis a chance—a reason to remain doubtful about existence of psi”—Journal of consciousness studies, 10, No. 6-7 2003, pp 29-50
2. Bahar Gholipour(2014) – 5visions that showed Nikola Tesla was ahead of time—www.livescience.com/46751-nikola-tesla-futuristic-ideas
3. Bem, D. J., & Honorton, C. (1994). ‘Does psi exist? Replicable evidence for an Psychological Bulletin, 115.
4. Braude, S. E. (2003). Immortal remains: The evidence for life after death. NY: Rowman & Littlefield.
5. Fields R Douglass (2008) – “Mind control by cell phones” paper in Scientific American May7, 2008 link scientificamerican.com/article/mind-control-by-cell/
6. Freris Leon (2013) ; Mind and matter; Communicative and Integrative Biology , Nov 2013 issue , vol 6(6):e26658 link : ncbi.nlm.nih.gov/pmc/articles/PMC3914914
7. Goldman, A. (1993). Religion notes. The New York Times, May 22, p. 25.
8. Gordon Richard(april2020) : Mind over matter -4 cutting edge scientific experiments proving your mind affects physical reality--- Conscious lifestyle Magazine,3463,State st#253, Santa Barbara CA93165 –link <https://www.consciouslifestylemag.com/mind-over-matter-experiments/>
9. Grimby, A. (1993). Bereavement amongst the elderly: Grief reactions, post-bereavement hallucinations and quality of life. Acta Psychiatrica Scandinavia, 87, 72–80.
10. Hansen (2001) Prominent “psychics”. G. P. Hansen, The trickster and the paranormal (Chapter 10). Philadelphia, PA: Xlibris Corporation.
11. Harris, Ben (1985). Gellerism Revealed: the Psychology and Methodology Behind the Geller Effect. Calgary: M. Hades International. pp. 195–196. ISBN 9780919230927
12. Hutson Matthews (2018), “Mind reading algorithm can decode the pictures in your head”. https://www.sciencemag.org/news/2018/01/mind-reading-algorithm-can-decode-pictures-your-headr3f_986=<https://www.google.com/>
13. James, W. (2002). Varieties of religious experience. London: Routledge; Taylor & Frances Group. (Original work published 1902).
14. John Beloff (1980) “Could there be a physical explanation for PSI” (Journal of the Society for Psychical Research, volume 50, No.783, March1980)
15. Krippner, S. (2000). Spotted Fawn’s farewell. In L. Lawson, Visitations from the afterlife: True stories of love and healing (pp. 87–88). San Francisco: HarperSanFrancisco.
16. Krippner (2006) Getting through the grief: After death communication experiences and their effect on Experiencers. (Survival of human consciousness, chapter 1-15 , pp 9-300)
17. Moreman C. M. (2006). Mystical experience and the afterlife. In L. Storm & M. A.

Parapsychology-Towards Causal Research

- Thalbourne (Eds.), *The survival of human consciousness: Essays on the possibility of life after death* (Chapter 2). Jefferson, NC: McFarland.
18. Myers David G(2011); *Is there ESP?* Myers David G, Psychology for AP. Worth Publishers, NY-2011
 19. Myers F (1903) *Human personality and its Survival of bodily death*. London, Longmans Green
 20. Naresh Kumar (2020) *will Parapsychology be ever accepted by mainstream science*, International Journal of social impact, volume 1 jan-march 2020 redshine publication, Gujarat india
 21. Naresh Kumar (2020) *Life after death –contemporary theories and beyond* -International Journal of Social Impact ISSN: 2455-670X Volume 5, Issue 2, DIP: 18.02.001/20200502 DOI: 10.25215/2455/0502001 volume5, 2020 redshine publication, Gujarat, India
 22. Phillip Ball(2017) :*The strange link between the human mind & Quantum Physics* , BBC Earth , (16-2-2017) . Link www.bbc.com/earth/story/20170215-the-strange-link-between-the-human-mind-and-quantum-physics
 23. Radin Dean (2006), *"Entangled Minds, extrasensory experiences in a quantum reality*, Paraview, 191 seventh avenue, New York, NY 10011
 24. Ralph Lewis(2019); *What actually is a thought? How is information physical?* Psychology Today 2019. www.psychologytoday.com/us/blog/finding-purpose/2019/02/what-actually-is-a-thought-how-is-information-physical/
 25. Ramachandran V S (2010), *"Unlocking the Mystery of Human Nature- The Tell Tale Brain*, Random House Publishers India Private limited, Windsor IT Park, 7th floor, Tower B, A-1, Sector-125, Noida, UP, India
 26. Samah Khaled Zahran(2017) *What is Psi? From Anti-Parapsychology to Psi as a Next Scientific Revolution: Theoretical Reviews and Hypothesized Vision*, American Journal of Applied Psychology, 2017, vol 5, no2, pp 33-44, Available online at <http://pubs.sciepub.com/ajap/5/2/1>
 27. Sheldrake, Rupert. *THE SENSE OF BEING STARED AT: EXPERIMENTS IN SCHOOLS*, Journal 62, 1998, pp. 311-23.
 28. Smith (2017), *Nikola Tesla's wildest project – the Thought projector---* www.disclose.tv/nikola-teslas-wildest-project-the-thought-projector-314535
 29. Sonali Bhatt marwaha and Prof Edwin C May (2015); *Rethinking Extrasensory Perception: Toward a Multiphasic Model of Precognition*; SAGE Open January-March 2015: 1–17
 30. Sonali Bhatt marwaha and Prof Edwin C May (2019); *Informational Psi –collapsing the problem space of psi phenomena*; Zeitschrift fur Anomalistik, vol 19(2019) pp 12-51
 31. Stevenson, I. (1984). *Language: New Studies in Xenoglossy*. Charlottesville: University Press of Virginia.
 32. Storm Lance (2006), *A solution: Radical Survivalism. The Survival of Human Consciousness—chapter 1-15*(pp 9-300).
 33. Sudduth Michael (2009), *Journal of scientific Explorations*, Vol23, no.2, pp167-193, 2009.
 34. Taylor, John, *A NEW THEORY FOR ESP*, Journal 62, 1998, pp. 289-310.
 35. Tesla Nikola (1933) *"tremendous New power soon to be released"* Kansas City Journal-post Sept 10, 1933
 36. Thalbourne(1982) *Theory of Psychopraxia*
 37. Wiseman R (2011) *"Paranormality—why we see what isn't there"* published in July 2011 by Mcmillan.

Parapsychology-Towards Causal Research

Acknowledgements

The author profoundly appreciates all the people who have successfully contributed to ensuring this paper in place. Their contributions are acknowledged however their names cannot be mentioned.

Conflict of Interest

The author declared no conflict of interest.

How to cite this article: Kumar. N (2020). Parapsychology-towards causal research. *International Journal of Social Impact*, 5(2), 74-95. DIP: 18.02.010/20200502, DOI: 10.25215/2455/0502010